



HQ USEUCOM JOINT PETROLEUM OFFICE (JPO)



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Impact of EU Low Sulfur Fuels Legislation
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Briefing Outline

Purpose

**Background: EU Environmental
Legislation**

“Potential” Impact of New Directives

US Military Concerns

Expected Outcome - Bottom Line

Summary - Actions



Briefing Purpose

***Provide Situational Awareness
of
European Union
Low-Sulfur Fuels Legislation***

**This Briefing is for
INFORMATION ONLY**



EU Environmental Legislation

Directive 1999/32/EC

- ▶ Limits Sulfur content of Marine gas oils used in EU waters
- ▶ 2,000 ppm from JUL 2000; 1,000 ppm starting JAN 2008
- ▶ F76 is at 6,500 ppm; low-sulfur JP-5 is < 1,000 ppm

Directive 2001/1/EC

- ▶ Requires on-board emissions equipment for diesel vehicles

Directive 2003/17/EC

- ▶ Limits marketing of diesel ground fuel based on sulfur content



“Potential” Impact (US Maritime Forces)

Usage restrictions on Marine gas oils while in EU waters

- ▶ **Significant impact**—costly to switch from F76 to JP5 (+.09/gal)
 - ▶ Ship fuel systems not set up to segregate bulk fuels
 - ▶ Current supply of JP5 can't support full changeover of ships
- ▶ Worst Case: vessels could be banned from EU ports/waters
- ▶ Possible lubricity problems with smaller diesel engines



“Potential” Impact (US Ground Forces)

Installing on-board diagnostics & diesel “catalytic converters”

- ▶ **Significant impact:** could require only low-sulfur diesel fuel
 - ▶ End “single fuel on the battlefield” concept
 - ▶ Significantly increase “logistics tail” for ground operations
- ▶ Cost to implement unknown—all non-armored/tracked vehicles

Sulfur restrictions on marketing of ground fuel

- ▶ **Minor Impact**—change is transparent if diesel used in-

garrison



US Concerns

1 Concern: Need to maintain military readiness

- ▶ Tactical Motor Vehicles (TMVs) are worldwide deployable
- ▶ Must be able to operate on high sulfur JP8/JP5 immediately when deployed
- ▶ Switching from low-sulfur in garrison to high-sulfur when deploying would compromise readiness (filters, drivability)
- ▶ Procuring new TMVs with emissions monitors that are intolerant to sulfur would affect reliability
- ▶ Continued use of JP-8/JP-5 is deemed necessary
 - ▶ National security
 - ▶ Force Readiness
 - ▶ Deployability of Armed Forces (both in US and overseas)



US Concerns (continued)

Effect on the “Single Fuel on the Battlefield” concept

- ▶ Logistics footprint must be minimized

Interoperability

- ▶ Need to push NATO-wide exemptions for TMVs

Fuel lubricity issues

- ▶ More studies needed to determine long-term impact

Impact on availability and quality of military fuels

- ▶ Quantity of L/S JP5 available impacts Navy compliance
- ▶ Concerns about quality of JP5 provided by suppliers



Expected Impact on US Forces

Usage restrictions on Marine gas oils while in EU waters

- ▶ **No immediate impact**—no inspections or citations to date
- ▶ Navy will request waivers from EU directives
 - ▶ Higher cost; limited supply of L/S JP5; lubricity concerns

Sulfur restrictions on marketing of ground fuel

- **Minor Impact**—change is transparent if diesel used in-garrison
- US can still use JP8/JP5 in tactical vehicles (“aviation” fuels)

Installing on-board diagnostics & diesel catalytic converters

- ▶ **No immediate impact**—US will request waivers under



Bottom Line

US Forces will always attempt to comply with host nation environmental laws where feasible

But.....US not mandated to comply

EUCOM's Position (per discussion with JA):

- ▶ US must “respect” or comply with host nation environmental laws and regulations unless they are “excessively burdensome”
- ▶ Status of Forces Agreements support US exemptions
 - ▶ National Security
 - ▶ Readiness
 - ▶ ~~Deployability of US Forces~~



EUCOM Actions

None at this time

EUCOM Sovereignty & Stationing Working Group 7 Apr

- ▶ EUCOM CD & CS attended
- ▶ ULSD topic briefed, no decisions made

EUCOM J4 (JPO) awaiting additional information

- ▶ Feedback from EU MOD & NATO fuels working groups
 - ▶ Meetings scheduled for April and July 04
 - ▶ Define "TMVs" for EU exemptions
 - ▶ Initiate discussion on waivers for US & NATO TMVs
- ▶ Additional study of lubricity problems needed

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